

Two Ways to Show the Same Data

Unit · Making graphs and comparing what they show

ELABORATION FOCUS

Creating different graphical representations of data using software where appropriate, comparing the representations, and identifying and describing common and distinctive features in response to questions.

LEARNING INTENTION I can show the same data in two graphs and compare them.

Graph

Picture

Column

Compare

Title

1

Start From the Table

Step 1: read the totals in your table. Step 2: keep the same categories.

2

Build the Graph

Step 3: draw one picture or one block for each answer. Step 4: line them up evenly.

3

Compare the Two

Step 5: look at both graphs. Step 6: say what is the same and what is different.

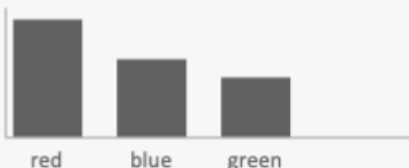
MODEL · ONE DATA SET, TWO GRAPHS

Red is the largest group in both graphs, because both are built from the same totals.

red ■■■■■■
blue ■■■■
green ■■■

picture graph

column graph



Both graphs show the same totals, so the tallest column matches the longest row of pictures.

TEACHER MODELLING ROUTINE

I do → We do → You do

WATCH FOR

Drawing pictures or columns different sizes, which makes the comparison unfair.

REMEMBER

Say it to students as: "What is the same in both graphs, and what is different?"

MATERIALS

Grid paper, sticky notes, counters, coloured squares, a tablet or graphing tool.

Teacher note: build both graphs from one table so students see the data has not changed, only the way it is shown. That is the whole idea behind comparing representations.